

Proposed edits to NAC 625.545

The Board believes the term “schedule” is more appropriate than “date”. Often when a contract is drafted, determining a singular date of completion is not possible because of factors outside of a professional’s control i.e. items to be provided by the client or review time periods by public entities. Providing a schedule is more helpful in managing client expectations than solely providing a project completion date. A schedule based on a project scope could be as simple as providing a completion date or could include milestones and deliverable dates including statements related to receiving items needed from parties outside of the professional’s control. An example of simple language for a schedule could be, “three weeks after we receive X, we will deliver Y”.

NAC 625.545 Written contract required for each client. (NRS 625.140) Before performing any work, a licensee shall enter into a written contract with each client for whom the licensee will perform work. The written contract must include, without limitation:

1. Provisions specifying:
 - (a) The scope of the work;
 - (b) The cost for completion of the work; and
 - (c) The anticipated ~~date~~ *schedule* for completion of the work.
2. A disclosure as to whether the licensee currently maintains a policy of professional liability insurance.

(Added to NAC by Bd. of Professional Eng’rs & Land Surv. by R152-09, eff. 10-15-2010; A by R085-18, 1-30-2019)

Proposed edits to NAC 625.655

Edits made for clarity, with last sentence removed as it is not necessary.

NAC 625.655 Applicability of statutes and regulations. (NRS 625.140, 625.250) When engaging in the practice of land surveying in this State, a professional land surveyor ~~shall~~ *must* apply all applicable statutes and regulations. ~~in addition to the minimum standards of practice for professional land surveyors established in NAC 625.651 to 625.795, inclusive.~~

(Added to NAC by Bd. of Reg'd Professional Eng'rs & Land Surv., eff. 7-18-88; A 7-10-92; A by Bd. of Professional Eng'rs & Land Surv., 11-14-97)

DRAFT

Proposed edits to NAC 625.666

Proposed changes are made to align with current technology and also conform with best practices recommended by NSPS.

NAC 625.666 Positional certainty: Horizontal and vertical components of certain land surveys. (NRS 625.140, 625.250)

1. *Surveying and mapping accuracy standard must be at the 95 percent confidence level.* The requirements for positional certainty for the horizontal component of land boundary, ~~topographic, control and geodetic~~ surveys are as follows:

Type of Survey	Positional Certainty	
	Meters	U.S. Survey Feet
Land Boundary Surveys		
High Urban.....	±0.02 m	±0.05/10 ft
Low Urban.....	±0.04 m	±0.15 ft
Suburban.....		±0.15 ft
High Rural.....	±0.1 m	±0.3 ft
Low Rural.....	±0.15 m	±0.5 ft
Control and Geodetic Surveys		
— Precise Measurement Studies.....	±0.001 m to ±0.01 m	±0.002 ft to ±0.03 ft
— State Network.....	±0.02 m	±0.05 ft
— County Network.....	±0.04 m	±0.15 ft
— Local Network.....	±0.06 m	±0.2 ft
— Photogrammetric Control.....	±0.06 m to ±1 m	±0.2 ft to ±3 ft
Topographic Surveys		
— Engineering Design Surveys.....	±0.01 m to ±0.1 m	±0.03 ft to ±0.3 ft
— Planning Study Surveys.....	±0.02 m to ±0.05 m	±0.05 ft to ±0.15 ft
— Utilities Mapping.....	±0.15 m	±0.5 ft
— Feature Mapping.....	±0.3 m	±1 ft
— Resource Mapping.....	±0.5 m to ±100 m	±1.5 ft to ±330 ft

2. The requirements for positional certainty for the vertical component of land boundary, ~~control, geodetic and topographic~~ surveys are as follows:

Type of Survey	Positional Certainty	
	Meters	U.S. Survey Feet
Land Boundary Surveys.....	±0.05 m	±0.15 ft
Control and Geodetic Surveys		
— Other Than	-	-
— Photogrammetric Control	-	-
— Surveys.....	±0.005 m to ±0.03 m	±0.02 ft to ±0.1 ft
-	-	-
— Photogrammetric Control	-	-
— Surveys.....	±0.03 m to ±0.5 m	±0.1 ft to ±1.5 ft
-	-	-
— Topographic Surveys.....	National Map Accuracy Standards	

3. ~~For the purposes of this section, the National Map Accuracy Standards, as they existed on November 14, 1997, are hereby adopted by reference. A copy of the National Map Accuracy Standards may be obtained from the United States Geological Survey, Department of the Interior, 12201 Sunrise Valley Drive, Reston, Virginia 20192, at no cost.~~ *Positional requirements as stated in section 1 and 2 above, must not be confused with the acceptance or rejection of existing controlling monuments for boundary determination.*

4. *For control surveys, the surveyor must document the horizontal and vertical datum, the coordinate system, as well as the reference points used to establish the control network, for boundary, topographic or construction surveys.*

5. *For topographic surveys that are intended to show the contour of the earth's surface, and/or the position of fixed objects, the surveyor must select the equipment and procedures to obtain the horizontal and vertical positional accuracy appropriate for the project. Typically, the positional accuracy will align with industry standards.*

6. *The documentation for the level of precision and positional accuracy must be included with any deliverable survey product, map, plat or survey. The level of precision and positional accuracy requirements must be included in the contract scope of work for the project.*

(Added to NAC by Bd. of Professional Eng'rs & Land Surv., eff. 11-14-97)

DRAFT

Proposed edits to NAC 625.670

Based on feedback from reviewing entities, proposed text expands detail of the minimum requirements for land boundary surveys.

NAC 625.670 Required research, identifications, measurements and computations. (NRS 625.140, 625.250) In conducting a land boundary survey, a professional land surveyor ~~shall~~ *must*:

1. Search pertinent documents, including, but not limited to, maps, deeds, title reports, title opinions and the records of the U.S. Public Land Survey System.
2. Thoroughly examine the information and data acquired, *and consider relationships and details such as:*
 - (a) Junior/senior property rights;*
 - (b) Retracement of the original survey;*
 - (c) Evidence provided by existing records; and*
 - (d) Proper application of the hierarchy of calls and the order of importance or priority of conflicting calls.*
3. Diligently search for and identify monuments and other physical evidence, including, *but not limited to, evidence of easements, physical occupation lines, and possible observed encroachments*, which could affect the location of the boundaries of the property being surveyed.
4. Conduct field measurements necessary to relate adequately the position of all apparent evidence pertinent to the boundaries of the property being surveyed.
5. Make computations to verify the correctness of field data acquired and confirm that results of measurements are within acceptable limits of tolerance. Computations must be made to determine the relative positions of all found evidence. *When a material discrepancy is found between the record and measured information, the measured information must be shown on the survey map in addition to all the pertinent record information.*

(Added to NAC by Bd. of Reg'd Professional Eng'rs & Land Surv., eff. 7-18-88; A 7-10-92; A by Bd. of Professional Eng'rs & Land Surv., 11-14-97)

Proposed edits to NAC 625.680

Edit for clarity, changing “shall” to “must”.

NAC 625.680 Disagreements concerning measurements or positions of monumented corners. (NRS 625.140, 625.250) If a professional land surveyor has a material disagreement with the measurements or monumented corner positions of another land surveyor, the professional land surveyor ~~shall~~ *must* contact the other land surveyor and attempt to resolve the disagreement.

(Added to NAC by Bd. of Reg'd Professional Eng'rs & Land Surv., eff. 7-18-88; A 7-10-92)

DRAFT

Proposed edits to NAC 625.700

Edit for clarity, changing “shall” to “must”.

NAC 625.700 Report to client of discrepancies concerning boundary lines. (NRS 625.140, 625.250) The professional land surveyor ~~shall~~ *must*:

1. Advise his or her client of discrepancies which raise doubts concerning the boundary lines of the property being surveyed; and
2. Provide a written report to the client concerning the discrepancies.

(Added to NAC by Bd. of Reg'd Professional Eng'rs & Land Surv., eff. 7-18-88; A 7-10-92)

DRAFT

Proposed edits to NAC 625.710

Committee recommends edit to cite reference to NRS 625.350 and NRS 625.380 in the regulation header.

NAC 625.710 Identification and description of monuments. (NRS 625.140, 625.250, *625.350, 625.380*)

1. All monuments, whether set or found, must be thoroughly described and specifically identified as set or found, whenever shown on maps or referred to in documents prepared by a professional land surveyor. Descriptions of monuments must be sufficient in detail to facilitate readily future recovery and to enable positive identification, including map references.
2. If the Nevada Coordinate System, as defined in chapter 327 of NRS, is used to describe a monument:
 - (a) The control used as the coordinate basis must be shown on any maps on which the monument is shown or documents in which reference is made to the monument; and
 - (b) The source of the control data used must be described.(Added to NAC by Bd. of Reg'd Professional Eng'rs & Land Surv., eff. 7-18-88; A 7-10-92; A by Bd. of Professional Eng'rs & Land

The proposed statutes to be cited in NAC 625.710 are shown below for reference

NRS 625.350 Record of survey: Form and contents.

1. A record of survey must be a map legibly drawn in waterproof ink on tracing cloth or produced by the use of other materials of a permanent nature generally used for that purpose in the engineering profession. The size of each sheet must be 24 by 32 inches. A marginal line must be drawn completely around each sheet, leaving an entirely blank margin of 1 inch at the top, bottom and right edges, and 2 inches at the left edge along the 24-inch dimension.
2. A record of survey must show:
 - (a) All monuments found, set, reset or replaced, describing their kind, size and location and giving other data relating thereto.
 - (b) Bearing or witness monuments, the basis of bearings, bearing and length of lines and the scale of the map.
 - (c) The name and legal description of the tract in which the survey is located and any ties to adjoining tracts.
 - (d) The tie to the control network maintained by the National Geodetic Survey of the National Oceanic and Atmospheric Administration, if points of the network are established in the area in which the survey is made.
 - (e) A memorandum of oaths, if any.
 - (f) The signature and validated stamp of the surveyor who performed the survey.
 - (g) A certificate prepared by the surveyor indicating:
 - (1) The person or entity for whom the survey was performed;
 - (2) The general vicinity of the property being surveyed;
 - (3) The date the survey was completed;
 - (4) Whether monuments were found or set and, if so, their character and location as shown; and
 - (5) Any other pertinent information.
 - (h) Any other data necessary for the interpretation of the various items and locations of the points, lines and areas shown.
3. If the land surveyed is described in terms of area, the record of the survey must show the area of the land surveyed in the following manner:
 - (a) In acres, calculated to the nearest one-hundredth of an acre, if the area is 2 acres or more; or
 - (b) In square feet, if the area is less than 2 acres.
4. As used in this section, "control network" means a system of coordinates that defines latitude, longitude, height, scale, gravity and orientation throughout the United States.
[Part 15:198:1919; added 1947, 797; A 1949, 639; 1953, 196; 1955, 391]—(NRS A 1960, 138; 1985, 899, 1691; 1993, 1195; 1997, 1048)

NRS 625.380 Requirements for monuments.

1. Except as otherwise provided in subsection 3, monuments set must be sufficient in number and durability and efficiently placed so as not to be readily disturbed to ensure, together with monuments already existing, the perpetuation of facile re-establishment of any point or line of the survey.
2. Any monument set by a professional land surveyor to mark or reference a point on a property or boundary line must be permanently and visibly marked or tagged with the number of the license of the professional land surveyor setting it, each number to be preceded by the letters "P.L.S."
3. Except as otherwise provided in subsection 4, if a monument cannot be set or reset because of steep terrain, water, marsh or existing structures, or if it would be obliterated as a result of construction or maintenance of any highway under the jurisdiction of the Department of Transportation, one or more reference monuments, as defined in NRS 329.120, must be set. In addition to the requirements for a monument set forth in subsections 1 and 2, the letters "RM" must be stamped in the tablet, disc or cap of the reference monument. One reference monument may be used if it is set on the actual line or a prolongation thereof. In all other cases, at least two reference monuments must be used. If the reference monuments do not appear on a record of survey filed in accordance with the provisions of NRS 625.340 to 625.380, inclusive, a corner record must be filed pursuant to chapter 329 of NRS.
4. The provisions of subsection 3 do not apply if federal law prohibits the destruction or removal of a monument.
[Part 15:198:1919; added 1947, 797; A 1949, 639; 1953, 196; 1955, 391]—(NRS A 1989, 786; 1997, 1049; 1999, 963)

Proposed edits to NAC 625.720

Based on feedback from reviewing entities, proposed text expands detail of the minimum requirements for drawing of a survey.

NAC 625.720 Drawing of survey; certification. (NRS 625.140, 625.250, 625.350)

1. *When A a professional land surveyor shall prepares a scaled drawing of the a survey for presentation to the a client, The drawing must comply with the provisions of NRS 625.340, 625.350 and 625.565. The map must be clearly and legibly drawn in a manner typically used for creating permanent records. The scale of the map must be large enough to clearly show details. The map must include required statutory and regulatory information, and at a minimum, the following:*

- a) A scale, legend, and a north arrow;*
- b) Each sheet of the map must indicate its particular number, the total number of sheets in the map and its relation to each adjoining sheet;*
- c) All recorded, measured, mathematical information, and necessary data to locate all monuments and to locate and retrace all interior and exterior boundary lines appearing thereon, including the bearings and distances of straight lines, central angle, radii and arc length for all curves and such information as may be necessary to determine the location of the centers of curves; and*
- d) A narrative on boundary analysis when the clarity is needed to support statement of fact.*

2. In cases where a certification is required by statute or local ordinance, the professional land surveyor shall certify only those matters personally known to be true.

3. The certificate *for a Record of Survey* must be in the following form:

SURVEYOR'S CERTIFICATE

I, (name of professional land surveyor), a Professional Land Surveyor registered in the State of Nevada, certify that:

1. This plat represents the results of a survey conducted under my supervision at the instance of (owner, trustee, etc.).
2. The land surveyed lies within (section, township, range, meridian, county and city, if incorporated), and the survey was completed on (date).
3. This plat complies with applicable statutes of this State and any local ordinances in effect on the date that the survey was completed, and the survey was conducted in accordance with chapter 625 of the Nevada Administrative Code.
4. The monuments depicted on the plat are of the character shown, occupy the positions indicated and are of sufficient durability.
5. (Any other information that the professional land surveyor personally knows to be true concerning the land surveyed.)

(Validated seal of the professional land surveyor);

(Name and license number of the professional land surveyor printed below the seal).

(Added to NAC by Bd. of Reg'd Professional Eng'rs & Land Surv., eff. 7-18-88; A 7-10-92; A by Bd. of Professional Eng'rs & Land Surv., 11-14-97)

Proposed edits to NAC 625.740

Recommendation to adopt the NSPS standard for classification of surveys – and also to move/re-number regulation to NAC 625.665 to have it precede positional certainty requirements.

NAC ~~625.665~~**740** Classifications of surveys; use of classifications and requirements for positional certainty. (NRS 625.140, 625.250)

1. Boundary surveys have been divided into the following ~~four~~ *three* classifications:

(a) ~~High~~ Urban. *Urban* Ssurveys *are performed ofon* land lying within or adjoining a city or town, *and including include surveys of* commercial and industrial properties, condominiums, townhouses, apartments, and other multiunit developments, regardless of geographic location. *All Land Title Surveys are included in this classification.*

(b) ~~Low Urban Suburban~~. *Suburban* Ssurveys *are performed ofon* land lying outside ~~high~~ urban areas and ~~used almost exclusively developed~~ for single family residential use. ~~or residential subdivisions.~~

(c) ~~High~~ Rural. *Rural* Ssurveys *are performed ofon land such as farms and other* undeveloped land lying outside the ~~low~~ urban and *suburban* areas ~~which may have potential for future development such as farms.~~

~~—(d) Low Rural. Surveys of land normally lying in remote areas with difficult or barren terrain and which usually have limited potential for development.~~

2. A professional land surveyor ~~shall~~ *must* use the classifications described in subsection 1 and the requirements for positional certainty for those classifications prescribed in NAC 625.666 to establish the locations of monuments in a boundary survey.

(Added to NAC by Bd. of Reg'd Professional Eng'rs & Land Surv., eff. 7-18-88; A by Bd. of Professional Eng'rs & Land Surv., 11-14-97)

Proposed edits to NAC 625.760

Edit for clarity, changing “shall” to “must”.

NAC 625.760 Contract drawings and specifications; special instructions. (NRS 625.140, 625.250) Before beginning a construction survey, a professional land surveyor ~~shall~~ *must* obtain from the owner’s representative a complete set of the contract drawings and specifications approved by the appropriate federal, state and local agencies and any special instructions for the proposed fixed works.

(Added to NAC by Bd. of Professional Eng’rs & Land Surv., eff. 11-14-97)

DRAFT

Proposed edits to NAC 625.770

Edit for clarity, changing “shall” to “must”.

NAC 625.770 Verification of location of certain points; notification of insufficient dimensions or details. (NRS 625.140, 625.250)

1. A professional land surveyor who is conducting a construction survey ~~shall~~ *must* ensure that:
 - (a) The location of the control that delineates the horizontal location of the proposed fixed works; and
 - (b) The locations of the benchmark for the project and the vertical location of the proposed fixed works,
→ are identical to the locations of those points as shown on the engineering plans for the project.

2. If the professional land surveyor discovers any material differences between the location of the control on the construction survey and the location of the control on the engineering plans for the project, he or she ~~shall~~ *must* notify the owner’s representative of those differences.

3. If the dimensions or details of the engineering plans are not sufficient to establish the location of the proposed fixed works, the professional land surveyor ~~shall~~ *must* notify the owner’s representative and the engineer or architect of record and request that the necessary additional information be provided.

(Added to NAC by Bd. of Professional Eng’rs & Land Surv., eff. 11-14-97)

DRAFT

Proposed edits to NAC 625.775

Edits proposed for clarity and to reflect current standards of practice.

NAC 625.775 Positional certainties for marking locations of proposed fixed works. (NRS 625.140, 625.250) A professional land surveyor who conducts a construction survey ~~shall~~ **must** place the stakes or other materials used to mark the location of the proposed fixed works within the following positional certainties:

Proposed Fixed Works	Horizontal Positional Certainty		Vertical Positional Certainty	
	Meters	Feet	Meters	Feet
Rough Grades.....	±0.03 m	±1 ft	±0.06 m	±0.2 ft
Subgrades.....	±0.15 m	±0.5 ft	±0.015 m	±0.05 ft
Finish Grades.....	±0.15 m	±0.5 ft	±0.015 m	±0.05 ft
Buildings.....	±0.015 m	±0.053 ft	±0.01 m	±0.03 ft
Sewer Facilities	±0.1 m	±0.3/ ft	±0.015 m	±0.053 ft
Waterlines.....	±0.1 m	±0.3/ ft	±0.03 m	±0.1 ft
Hydrants Water Facilities Other Than	-		-	
Waterlines	±0.03 m	±0.1 ft	±0.015 m	±0.05 ft
Street Lights and Devices for the Control of	-		-	
Traffic	±0.06 m	±0.2 ft	±0.03 m	±0.1 ft
Curbs and Gutters.....	±0.03 m	±0.1/5 ft	±0.015 m	±0.053 ft

(Added to NAC by Bd. of Professional Eng'rs & Land Surv., eff. 11-14-97)

DRAFT

Proposed edits to NAC 625.780

Committee originally recommend the repeal of the regulation, with the caveat that the need for stake out data be reference elsewhere – proposing it be added to NAC 625.670 Required research, identifications, measurements and computations. But following further consideration, and the inability cohesively insert the intent of the NAC 625.780 into NAC 625.670, staff is recommending the regulation be retained with edits proposed.

NAC 625.780 Sketches, cut sheets and field notes. (NRS 625.140, 625.250) A professional land surveyor who conducts a construction survey ~~shall~~ *must retain* ~~provide the owner's representative~~ sketches, cut sheets or other field notes *created* to ~~describe~~ *support* the survey conducted.

(Added to NAC by Bd. of Professional Eng'rs & Land Surv., eff. 11-14-97)

DRAFT

Proposed edits to NAC 625.785

Edit for clarity, changing “shall” to “must”.

NAC 625.785 Verification surveys: Exchange of information. (NRS 625.140, 625.250) If a professional land surveyor other than the surveyor responsible for the initial location of the proposed fixed works conducts a verification survey, the professional land surveyor ~~shall~~ *must* share with the surveyor responsible for the initial location of the proposed fixed works notes and other data related to the verification survey. Each surveyor ~~shall~~ *must* provide to the other surveyor the results of the survey conducted by him or her and cooperate to resolve any discrepancies between the two surveys.

(Added to NAC by Bd. of Professional Eng'rs & Land Surv., eff. 11-14-97)

DRAFT

Proposed edits to NAC 625.790

Edit for clarity, changing “shall” to “must”.

NAC 625.790 Preparation of legal description of property. (NRS 625.140, 625.250) If a professional land surveyor is called upon to prepare a legal description of real property, the professional land surveyor ~~shall~~ *must* include:

1. A sufficient caption, body and, where applicable, qualifying clauses;
2. A clear statement of the relationship between the real property being described and the survey control or the basis of the unique location;
3. A clear statement explaining the basis of bearings or language which otherwise makes definite the method of direction and orientation for the lines of the property being described and the survey control related thereto;
4. Full and complete citations to maps, plats, documents and other matters of record, facts of pertinence, which are intended to be incorporated into and made a part of the legal description by reference thereto;
5. When called out, complete and detailed descriptions of physical monuments, both natural and artificial;
6. When appropriate, incorporated either directly or by citation, sufficient data to enable a check of mathematical closure for the property being described; and
7. His or her name, the number of his or her Nevada license and his or her validated seal.

(Added to NAC by Bd. of Reg'd Professional Eng'rs & Land Surv., eff. 7-18-88; A 7-10-92)